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PATENT
15-RI-00501

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ting Y. Lee

Serial No.: 10/007,341

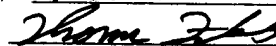
Filed: October 25, 2001

For: METHOD AND APPARATUS
FOR CALCULATING BLOOD
FLOW PARAMETERS

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: Art Unit: 2121
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: Examiner:
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CERTIFICATE OF MAILING

I certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Office of Initial Patent Examination, Customer Service Center, Washington, D.C. 20231, on 1-23-02, 2002.


Thomas M. Fisher, Reg. No. 47,564

REQUEST FOR CORRECTION OF FILING RECEIPT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicant respectfully requests that the filing receipt in the present application be corrected to set forth the correct filing date. Specifically, the filing receipt (copy attached) sets forth a filing date of October 26, 2001. However, the correct filing date is October 25, 2001.

In support of the requested correction, copies of the "Express Mail" mailing label (showing a Deposit Date of 10/25/01) and the Certificate of Mailing by "Express Mail" (setting forth a date of mailing of October 25, 2001) submitted with the present application, a copy of the

USPS internet page 'Shipping Center, Track & Confirm' page showing arrival date at processing center as October 25, 2001 (from <http://www.usps.com/shipping/epstrac.htm>), and the first page of the present patent application having the number of the "Express Mail" mailing label thereon as submitted to the U.S. Patent and Trademark Office, are attached hereto. In accordance with 37 C.F.R. §1.10, Applicant respectfully submits that the correct filing date of the present application is October 25, 2001. Accordingly, Applicant respectfully requests that the filing date set forth on the filing receipt be corrected to set forth October 25, 2001, as the application filing date. Applicant believes that no fee is due for this request; however, if a fee is due, then please charge the appropriate fee to deposit account 01-2384.

Applicant further requests that a new, corrected filing receipt be issued.

Respectfully submitted,



Thomas M. Fisher
Reg. No. 47,564
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
10/007,341	10/26/2001 10/25/2001	2121	938	15-RI-00501	1	31	3

CONFIRMATION NO. 3220

FILING RECEIPT



OC00000007286508

John S. Beulick
Armstrong Teasdale LLP
Suite 2600
One Metropolitan Sq.
St. Louis, MO 63102

Date Mailed: 01/09/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Ting Y. Lee, London, CANADA;

Domestic Priority data as claimed by applicant

THIS APPLN CLAIMS BENEFIT OF 60/243,196 10/25/2000

Foreign Applications

If Required, Foreign Filing License Granted 01/09/2002

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

Early Publication Request: No

Title

Method and apparatus for calculating blood flow parameters

Preliminary Class

700

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Date: 1/15/02
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12553-234

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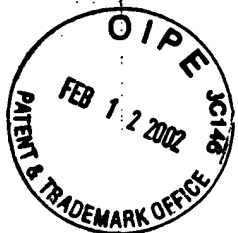
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Atty Dkt. No.: 15-RI-00501 (12553-234)
In Re Application of: Ting Y. Lee
For: METHOD AND APPARATUS FOR CALCULATING BLOOD FLOW
PARAMETERS

Enclosed: Utility Patent Application, claiming priority of Provisional Patent
Application Serial No. 60/243,196, filed 10/25/00, including:

Utility Patent Application Transmittal (1 pg.)
Fee Transmittal (1 pg.), in duplicate
Application: Specification (33 pgs.), Claims (12 pgs.) and Abstract (1 pg.)
One (1) sheet of drawings
Declaration and Power of Attorney (2 pgs.) (submitted for identification of
Inventor only)
Express Mail Certificate (1 pg.)

Express Mail Label No. EL752185936US

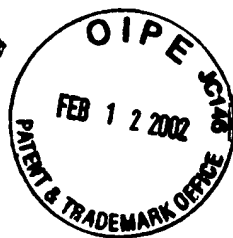
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Express Mail mailing label number: EL752185936US

Date of Mailing: October 25, 2001

I certify that the attached utility patent application claiming the benefit of Provisional Application Serial No. 60/243,196 filed October 25, 2000, of **TING Y. LEE** for **METHOD AND APPARATUS FOR CALCULATING BLOOD FLOW PARAMETERS**, including:

- Utility Patent Application Transmittal (1 pg.)
- Fee Transmittal (1 pg.), in duplicate
- Application: Specification (33 pgs.); Claims (12 pgs.); and Abstract (1 pg.)
- One (1) sheet of drawings
- Declaration and Power of Attorney (2 pages) (submitted for identification of inventor only)
- Return post card

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METHOD AND APPARATUS FOR CALCULATING BLOOD FLOW PARAMETERS

CROSS REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S. provisional application No. 60/243,196 filed October 25, 2000.

BACKGROUND OF THE INVENTION

[0001] This invention relates generally to methods and apparatus for imaging systems and, more particularly, for calculating blood flow parameters.

[0002] Stroke is a leading cause of disability among adults in North America. A National Institute for Neurological Diseases and Stroke (NINDS) trial was the first study to demonstrate that thrombolytic treatment within the first 3 hours of symptom onset is beneficial to stroke victims. However, treating patients beyond the initial 3 hours of illness with a thrombolytic treatment may carry a risk of intracranial bleeding which has resulted in a setback in the use of thrombolysis. This setback in the use of thrombolysis has prompted the realization that a more rigorous selection of patients according to certain criteria may reduce the risk of intracranial bleeding and thus, extend the therapeutic window for this therapy beyond the current 3-hour limit to benefit more patients.

BRIEF SUMMARY OF THE INVENTION

[0003] In one aspect, a method for determining tissue type is provided. The method includes quantitatively determining a tissue blood flow (TBF) by deconvoluting $Q(t)$ and $C_a(t)$, where $Q(t)$ represents a curve of specific mass of contrast, and $C_a(t)$ represents an arterial curve of contrast concentration, and quantitatively determining a tissue blood volume (TBV) by deconvoluting $Q(t)$ and $C_a(t)$. The method also includes quantitatively determining a tissue mean transit time (TMTT) by deconvoluting $Q(t)$ and $C_a(t)$, and quantitatively determining a tissue capillary permeability surface area product (TPS) by deconvoluting $Q(t)$ and $C_a(t)$.